--IN THE SPECIFICATION--

Please replace the abstract filed with the response dated May 2nd, 2005, with the following new abstract:

--The present invention provides single-color and multi-color protein fragment complementation assays for drug discovery, in particular to identify compounds that activate or inhibit cellular pathways. Based on the selection of an interacting protein pair combined with an appropriate PCA reporter such as monomeric enzymes and fluorescent proteins, the assays may be run in high-throughput or high-content mode and may be used in automated screening of libraries of compounds. Methods are described for constructing such assays for one or more steps in a biochemical pathway; testing the effects of compounds from combinatorial, natural product, peptide, antibody, nucleic acid or other diverse libraries on the protein or pathway(s) of interest; and using the results of the screening to identify specific compounds that activate or inhibit the protein or pathway(s) of interest. The development of such assays provides for a broad, flexible and biologically relevant platform for drug discovery.--